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EXAMINER

VAN DOREN, BETH

ART UNIT	PAPER NUMBER
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3623

DATE MAILED: 04/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/824,852

Applicant(s)

JACOBS ET AL.

Examiner

Beth Van Doren

Art Unit

3623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 July 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-81 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-81 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The following is a non-final office action in response to the application filed on 04/02/01 and the preliminary amendment filed 07/13/01. Claims 1, 10-11, 16, 20, 29, 30, and 32 were amended by this preliminary amendment. Claims 1-81 are pending in this application.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-10 and 21-57 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The basis of this rejection is set forth in a two-prong test of:

- (1) whether the invention is within the technological arts; and
- (2) whether the invention produces a useful, concrete, and tangible result.

For a claimed invention to be statutory, the claimed invention must be within the technological arts. Mere ideas in the abstract that do not apply, involve, use, or advance the technological arts fail to promote the "progress of science and the useful arts" (i.e. the physical sciences as opposed to social sciences, for example) and therefore are found to be non-statutory subject matter. For a process claim to pass muster, the recited process must somehow apply, involve, use, or advance the technological arts.

In the present case, claims 1-10 and 21-57 do not specifically recite any technological elements in the bodies of the claims that place them within the technological arts. As for claim 1-10 and 34-57, the claims recite a method for scheduling mobile service representatives by negotiating an appointment, assigning the reservation, and optimizing the shifts. None of these

Art Unit: 3623

steps are specifically performed using any technology. As for claims 21-33, these claims recite a system including a negotiator, an assigner, and an optimizer. However, it is unclear from the claim as to whether or not all of these elements are system components performed via a network or some kind of technology, or if these are something else. For example, the negotiator negotiates the appointment window. It is not clear if this negotiator is interactive software or an order taker person, such as a call taker. Therefore, the system is not specifically made up of system elements.

Although the claimed invention does produce a useful, concrete, and tangible result, since the claimed invention is not within the technological arts, as explained above, claims 1-10 and 21-57 are deemed to be directed towards non-statutory subject matter.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 11 and 58 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 11 and 58 recite “a computer readable medium having instructions stored thereon for causing a computer to perform a method for scheduling”. The method includes negotiating, booking, and optimizing. The preamble indicates that all these steps are the result of the instructions. However, it is not clear if all the limitations are performed by the computer. Specifically, it is not clear how the computer would cause the result of negotiation. Clarification is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5, 8-15, 18-23, 26, 27, 29, 32-50, 53-74, and 77-81 are rejected under 35

U.S.C. 102(b) as being anticipated by MDSI Mobile Data Solutions (www.mdsi-advantex.com).

5. As per claim 1, MDSI Mobile Data Solutions teaches a method for scheduling, comprising:

negotiating a reservation to perform an order for a customer against a schedule (See page 3, section 1, and page 4, sections 2-3, wherein the reservation is negotiated);

booking the order having a priority to a shift of a mobile service representative (See page 3, sections 1-2, and page 4, wherein the service order is booked to a schedule of a mobile worker); and

optimizing periodically the shift of the mobile service representative (See page 3, section 1, and page 4, sections 2-3, wherein the shifts are rebalanced periodically).

6. As per claim 2, MDSI Mobile Data Solutions teaches configuring a constraint set, wherein the act of configuring allows a user to modify the constraint set so as to control the way in which orders are assigned to a mobile service representative (See page 4, sections 2-3, wherein the system has a set including priority, skills, etc. that is used to assign service orders).

7. As per claim 3, MDSI Mobile Data Solutions wherein negotiating includes using a window over the schedule, wherein the window defines a set of shifts in the schedule that can be

Art Unit: 3623

booked by the act of booking (See page 4, sections 2-3, and page 5, sections 2-3, wherein a window is used to view the availability of the mobile workers).

8. As per claim 4, MDSI Mobile Data Solutions discloses wherein negotiating includes negotiating an appointment window for the order so as to allow the mobile service representative to begin the performance of the order within the time frame of the appointment window (See page 4, sections 2-3, and page 5, sections 2-5, which discusses performance of the service order).

9. As per claim 5, MDSI Mobile Data Solutions discloses bumping an order, which has a lower priority, for another order, which has a higher priority (See page 3, section 2, page 4, sections 1-3, wherein the service orders are rebalanced based on priority and emergencies).

10. As per claim 8, MDSI Mobile Data Solutions teaches wherein optimizing includes optimizing a single shift of a mobile service representative so as to shorten travel time between orders booked in the single shift (See page 4, section 3, and page 5, sections 2-3, wherein mobile workers are assigned as close to their location as possible).

11. As per claim 9, MDSI Mobile Data Solutions discloses wherein optimizing includes optimizing at least one pair of shifts, wherein optimizing is selected from a group consisting of swapping orders between the at least one pair of shifts and reassigning orders between the at least one pair of shifts (See page 4, sections 2-3, and page 5, sections 2-3, wherein the dispatcher rebalances the schedule).

12. As per claim 10, MDSI Mobile Data Solutions teaches wherein booking includes booking the order to a shift of the mobile service representative if the mobile service representative has the set of skills and the set of equipment (See page 4, sections 2-3, which discusses criteria for booking a mobile worker).

Art Unit: 3623

13. Claims 11-15 and 18-20 recite equivalent limitations to claims 1-5 and 8-10, respectively, and are therefore rejected using the same art and rationale as applied above.

14. As per claim 21, MDSI Mobile Data Solutions discloses a scheduling system for a dispatching environment, comprising:

a negotiator to negotiate an appointment window to perform an order (See page 3, section 1, and page 4, sections 2-3, wherein the reservation is negotiated);

an assigner to assign the order to a shift of a mobile service representative (See page 3, sections 1-2, page 4, wherein the service order is booked to a schedule of a mobile worker); and

an optimizer to optimize dynamically at least one shift so as to enhance the scheduling system in accordance with a predetermined set of business objectives (See page 3, section 1, and page 4, sections 2-3, wherein the shifts are rebalanced periodically).

15. As per claim 22, MDSI Mobile Data Solutions teaches wherein the order is defined by a data structure that includes an appointment window, a duration, a priority, a location, and a set of skills required to carry out the order, and wherein the data structure resides on a computer media (See page 1, section 1, page 3, page 4, sections 2-3, and page 5, section 2, which disclose duration, priority, location, etc.).

16. As per claim 23, MDSI Mobile Data Solutions teaches wherein the mobile service representative is defined by a data structure that includes a set of skills that the mobile service representative possesses and the equipment that the mobile service representative possesses, and wherein the data structure resides on a computer media (See page 4, sections 2-3, which discusses criteria for booking a mobile worker).

17. As per claim 26, MDSI Mobile Data Solutions teaches wherein the appointment window includes an identifier, a start time, and an end time, and wherein the appointment window is visible to the negotiator (See page 3, section 1, page 4, sections 2-3, and page 5, sections 2-3, which discuss an appointment window visible to the negotiator).
18. As per claim 27, MDSI Mobile Data Solutions teaches wherein the order includes a predetermined level of priority, wherein the predetermined level of priority of the order determines whether the order will be bumped by another order having a higher level of priority (See page 3, section 2, page 4, sections 1 and 3, discussing priority of an order in scheduling).
19. As per claim 29, MDSI Mobile Data Solutions teaches wherein the assigner includes an assignment filter that finds a set of shifts that is suitable to perform the order, wherein the assignment filter returns the set of shifts (See page 4, sections 2-3, which discusses automatic assignment).
20. As per claim 32, MDSI Mobile Data Solutions teaches wherein the optimizer includes an optimizing filter, wherein the optimizing filter finds a shift into which a reservation fits, with the purpose of better satisfying the optimization objectives (See page 3, sections 1-2, and page 4, wherein the shifts are optimized automatically).
21. As per claim 33, MDSI Mobile Data Solutions teaches wherein the optimizer includes an optimization objective component having a set of optimization objectives, wherein the optimization objective component determines the degree to which the set of optimization objectives are satisfied if the optimizer were to optimize a shift or a pair of shifts (See page 3, sections 1-2, and page 4, wherein the shifts are optimized automatically).

Art Unit: 3623

22. As per claim 34, MDSI Mobile Data Solutions teaches a method for scheduling mobile service representatives, comprising:

negotiating an appointment window for booking a reservation (See page 3, section 1, and page 4, sections 2-3, wherein the reservation is negotiated);

assigning the reservation to a shift of a mobile service representative (See page 3, sections 1-2, and page 4, wherein the order is booked to a schedule of a mobile worker); and

optimizing periodically the shift of the mobile service representative while the acts of negotiating and assigning are executing (See page 3, section 1, and page 4, sections 2-3, wherein the shifts are rebalanced periodically).

23. As per claim 35, MDSI Mobile Data Solutions discloses adding a mobile service representative, wherein adding the mobile service representative includes identifying a working area of the mobile service representative, a set of skills of the mobile service representative, and a set of equipment types that is possessed by the mobile service representative (See page 4, sections 2-3, which considers attributes of the mobile worker in the assignment).

24. As per claim 37, MDSI Mobile Data Solutions teaches adding a reservation, wherein adding a reservation includes identifying a duration, a priority, a location, an appointment window, a mobile service representative, a bumping indicator, and an aggregation indicator (See page 3, page 4, sections 2-3, and page 5, sections 2-3, which disclose these criteria).

25. As per claim 38, MDSI Mobile Data Solutions teaches finding a list of appointment windows for the act of negotiating (See page 3, sections 1-2, page 4, and page 5, section 3, which discusses appointment windows).

Art Unit: 3623

26. As per claim 39, MDSI Mobile Data Solutions discloses assigning forcibly a reservation when the act of assigning the reservation has failed (See page 4, section 3, which discusses the dispatcher overriding or manually entering a reservation).
27. As per claim 40, MDSI Mobile Data Solutions teaches removing an assignment of a reservation (See page 5, section 4, wherein an assignment is removed).
28. As per claim 41, MDSI Mobile Data Solutions teaches canceling a reservation (See page 5, section 4, wherein the reservation is canceled when no one is available).
29. As per claim 42, MDSI Mobile Data Solutions teaches completing a reservation so as to inhibit the reservation from being bumped, aggregated, or moved to another shift (See page 3, section 2, page 4, sections 1 and 3, wherein an emergency reservation cannot be bumped).
30. As per claims 43 and 44, MDSI Mobile Data Solutions teaches reassigning forcibly a reservation (See page 4, section 3, wherein the dispatcher rebalances the assignments manually).
31. As per claim 45, MDSI Mobile Data Solutions teaches assigning a bumped or a yanked reservation (See page 4, section 3, wherein a bumped reservation is reassigned when rebalancing occurs).
32. As per claim 46, MDSI Mobile Data Solutions teaches setting at least one property from a set of properties of a reservation (See page 4, which sets information about the appointment).
33. As per claim 47, MDSI Mobile Data Solutions teaches modifying a mobile service representative (See page 4, section 3, wherein the representative's assignments are changed).
34. As per claim 48, MDSI Mobile Data Solutions teaches deleting a mobile service representative (See page 4, sections 2-3, wherein when an order is reassigned, the worker is deleted from the task).

Art Unit: 3623

35. As per claims 49 and 50, MDSI Mobile Data Solutions teaches modifying forcibly a shift (See page 4, section 3, wherein the representative's assignments are changed).
36. As per claim 53, MDSI Mobile Data Solutions teaches notifying a subscriber when a reservation event occurs (See page 5, section 4, wherein the customer is notified via call ahead).
37. As per claim 54, MDSI Mobile Data Solutions teaches getting reservation assignment information (See page 4, section 2-3, wherein the system receives the assignment information).
38. As per claims 55 and 56, MDSI Mobile Data Solutions teaches getting mobile service representative assignment information (See page 1, section 1, page 3, page 4, section 1, page 5, section 1, page 6, wherein the assignment is communicated to the mobile worker).
39. As per claim 57, MDSI Mobile Data Solutions teaches confirming a reservation (See page 5, section 4, wherein the reservation is confirmed).
40. Claims 58-74 and 77-81 recite equivalent limitations to claims 34-50 and 53-57, respectively, and are therefore rejected using the same art and rationale as applied above.

Claim Rejections - 35 USC § 103

41. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6, 16, 24, 25, 28, 30, 31, 51, 52, 75, and 76 are rejected under 35 U.S.C. 103(a) as being unpatentable over MDSI Mobile Data Solutions (www.mds-advantex.com) and Lesaint et al. (U.S. 6,578,005).

Art Unit: 3623

42. As per claim 6, MDSI Mobile Data Solutions discloses a priority of an order (See page 3, section 2, and page 4, which discuss priorities of tasks). However, MDSI Mobile Data Solutions does not expressly disclose and Lesaint et al. discloses escalating the priority of an order over time when the order has not been performed by the mobile service representative (See column 12, sections 50-67, which discuss priority of earliest first).

Both MDSI Mobile Data Solutions and Lesaint et al. teach systems that optimize the scheduling of tasks to workers in a remote service industry, the tasks having associated priorities. MDSI Mobile Data Solutions specifically discusses priorities of appointments, rebalancing schedules to meet commitments, and the consequences of missed appointments. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to escalate the priority of an order over time to increase the standards of service offered by the service organization by ensuring tasks are completed in a timely manner. See page 1, page 4, sections 2-3, and page 5, section 5, which discuss priorities and the consequence of missed appointments and time commitments.

43. As per claim 24, MDSI Mobile Data Solutions teaches assigning orders to mobile service representatives' shifts using constraints of the order and constraints of the mobile representative (See page 4, sections 2-3). However MDSI Mobile Data Solutions does not expressly disclose and Lesaint et al. discloses a shift being defined by a data structure that includes a shift start date and start time, a shift end date and end time, a set of break start dates and start time, a set of break end dates and end times, and a starting location and an ending location, and wherein the data structure resides on a computer media (See column 11, lines 35-65, and column 12, lines 1-11 and 50-67, column 27, lines 30-47, which discuss shift constraints such as these).

Both MDSI Mobile Data Solutions and Lesaint et al. teach systems that optimize the scheduling of tasks to workers in a remote service industry, the assignment of tasks to workers considering availability. MDSI Mobile Data Solutions further discusses considering travel time, service area, etc. when assigning workers to orders. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include specific times associated with shift events in order to more efficiently match workers to orders based on time commitments and availability, thus increasing the standards of service offered. See page 1, page 4, sections 2-3, and page 5, section 5.

44. As per claim 25, MDSI Mobile Data Solutions teaches wherein the assigner accounts for the travel time of the mobile service representative of the mobile service representative in assigning the order to the shift of the mobile service representative (See page 4, sections 2-3, and page 5, sections 2-3, wherein the system has a set including travel time). However, MDSI Mobile Data Solutions does not expressly disclose and Lesaint et al. discloses break time (See column 11, lines 35-65, and column 12, lines 1-11, which discusses assigning orders with a consideration of a worker's breaks).

Both MDSI Mobile Data Solutions and Lesaint et al. teach systems that optimize the scheduling of tasks to workers in a remote service industry, the assignment of tasks to workers considering availability. Workers' having required breaks throughout shifts is old and well known in the labor industry. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include specific times associated with shift events in order to more efficiently schedule workers based on the workers' availability, thus increasing the standards of service offered. See page 1, page 4, sections 2-3, and page 5, section 5.

Art Unit: 3623

45. As per claim 28, MDSI Mobile Data Solutions does not expressly disclose and Lesaint et al. teaches wherein the order includes several orders that have been aggregated (See column 12, lines 30-50, column 14, lines 15-25, wherein the order is made up of multiple orders).

It is old and well known in the service industry that some tasks/orders would require more than one worker to complete the order. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include scheduling aggregate orders in order to more efficiently meet the needs of the person placing the order.

46. As per claim 36, MDSI Mobile Data Solutions teaches adding orders to mobile service representatives' shifts using constraints of the order and constraints of the mobile representative (See page 4, sections 2-3). However MDSI Mobile Data Solutions does not expressly disclose and Lesaint et al. discloses adding a shift, wherein adding a shift includes identifying a mobile service representative to be associated with the shift, a start time, an end time, and a set of breaks (See column 11, lines 35-65, and column 12, lines 1-11 and 50-67, column 27, lines 30-47, which discusses assigning orders with a worker with consideration of a worker's breaks, a start time, and an end time).

Both MDSI Mobile Data Solutions and Lesaint et al. teach systems that optimize the scheduling of tasks to workers in a remote service industry, the assignment of tasks to workers considering availability. MDSI Mobile Data Solutions further discusses considering travel time, service area, etc. when assigning workers to orders. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include specific times associated with shift events in order to more efficiently match workers to orders based on time

commitments and availability, thus increasing the standards of service offered. See page 1, page 4, sections 2-3, and page 5, section 5.

47. As per claim 30, MDSI Mobile Data Solutions does not expressly disclose and Lesaint et al. discloses an assignment error component that returns a set of reasons when an order cannot be assigned, wherein the assignment error component distinguishes between why the order cannot be assigned to a mobile service representative and why the order cannot be assigned to one of the shifts of the mobile service representative (See column 8, lines 5-20 and 35-62, wherein an error occurs and is reported).

Both MDSI Mobile Data Solutions and Lesaint et al. teach systems that optimize the scheduling of tasks to workers in a remote service industry. MDSI Mobile Data Solutions further discusses missed appointments and assignments being made by recommendations being reported to a dispatcher by the system and needing approval. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to report error messages when assignments cannot occur in order to increase the standards of service by ensuring that orders are assigned to workers and therefore completed. See page 1, page 4, sections 2-3, and page 5, section 5.

48. As per claim 31, MDSI Mobile Data Solutions teaches a travel time component that considers travel time when assigning shifts to mobile representatives (see page 4, section 2-3, and page 5, sections 2-3, wherein the location of the worker is considered when the task is assigned). However, MDSI Mobile Data Solutions does not expressly disclose and Lesaint et al. discloses calculating the travel time between the start of a shift to the first order assigned to the shift and the travel time between two orders, and the travel time between the last order assigned

Art Unit: 3623

to the shift and the end of the shift (See column 7, lines 48-65, column 9, lines 5-15, column 13, lines 38-65, column 18, lines 25-30, column 25, lines 20-40, and column 27, lines 30-47, wherein travel time is calculated in such a manner).

Both MDSI Mobile Data Solutions and Lesaint et al. teach systems that optimize the scheduling of tasks to workers in a remote service industry, the assignment of tasks to workers considering availability. MDSI Mobile Data Solutions further discusses considering travel time, service area, etc. when assigning workers to orders. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include specific times associated with shift events in order to more efficiently match workers to orders based on time commitments and availability, thus increasing the standards of service offered. See page 1, page 4, sections 2-3, and page 5, section 5.

49. As per claims 51 and 52, MDSI Mobile Data Solutions teaches rebalancing a schedule and removing a shift from the schedule of one worker and placing the shift on another schedule (See page 4). However, MDSI Mobile Data Solutions does not expressly disclose and Lesaint et al. discloses deleting forcibly a shift (See column 7, lines 1-15, column 31, lines 44-60, wherein a shift is removed).

Both MDSI Mobile Data Solutions and Lesaint et al. teach systems that optimize the scheduling of tasks to workers in a remote service industry, the assignment of tasks to workers considering availability. It is old and well known in the labor industry that workers call out sick. MDSI Mobile Data Solutions discusses rebalancing schedules and communicating information to remote workers. Therefore, it would have been obvious to one of ordinary skill in the art at the

Art Unit: 3623

time of the invention to include deleting a shift of the user in order to increase the dynamics of the system by allowing the system to compensate for all possible changes. See pages 1 and 3.

50. Claims 16, 75, and 76 recite equivalent limitations to claims 6, 51, and 52, respectively, and are therefore rejected using the same art and rationale as applied above.

51. Claims 7 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over MDSI Mobile Data Solutions (www.mds-advantex.com) and Kocur (U.S. 5,913,201).

52. As per claim 7, MDSI Mobile Data Solutions teaches scheduling an order with a mobile service representative (See page 3, sections 1-2, page 4, wherein the service order is booked to a schedule). However, MDSI Mobile Data Solutions does not expressly disclose and Kocur discloses splitting an order to a set of orders when the performance of the order requires a number of days to perform the order (See column 3, lines 24-35, wherein an order is performed over multiple days).

Both MDSI Mobile Data Solutions and Kocur disclose computerized system that assign workers to orders. It is old and well known in the service industry that not all service requests are compleable in a single day and require multiple days of work. Therefore, since MDSI Mobile Data Solutions discloses assigning field service workers to requests of a customer based on the requirements of the customer, it would have been obvious to one of ordinary skill in the art at the time of the invention to allow for the assignment of an order over multiple days in order to order to more efficiently meet the needs of the person placing the order.

53. Claim 17 recites equivalent limitations to claim 7 and is therefore rejected using the same art and rationale as applied above.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Sisley et al. (U.S. 5,737,728) discloses assigning technicians to orders while considering shift, location, and skill constraints.

Crockett (U.S. 5,325,292) teaches a tour generation system that considers the hours of a worker when scheduling shifts.

Edgar et al. (U.S. 5,848,395) discloses an appointment scheduling system that assigns orders and resources to specific time slots.

Bucci et al. (U.S. 6,823,315) discloses removing, adding, and replacing shifts in a scheduling system that assigns work shifts to employees.

Ginsberg et al. (U.S. 6,070,144) discloses job scheduling that creates optimized schedules while considering scheduling constraints.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Beth Van Doren whose telephone number is (571) 272-6737. The examiner can normally be reached on M-F, 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on (571) 272-6729. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.


Art Unit: 3623

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ewd

bvd

April 13, 2005


TARIQ R. HAFIZ
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600